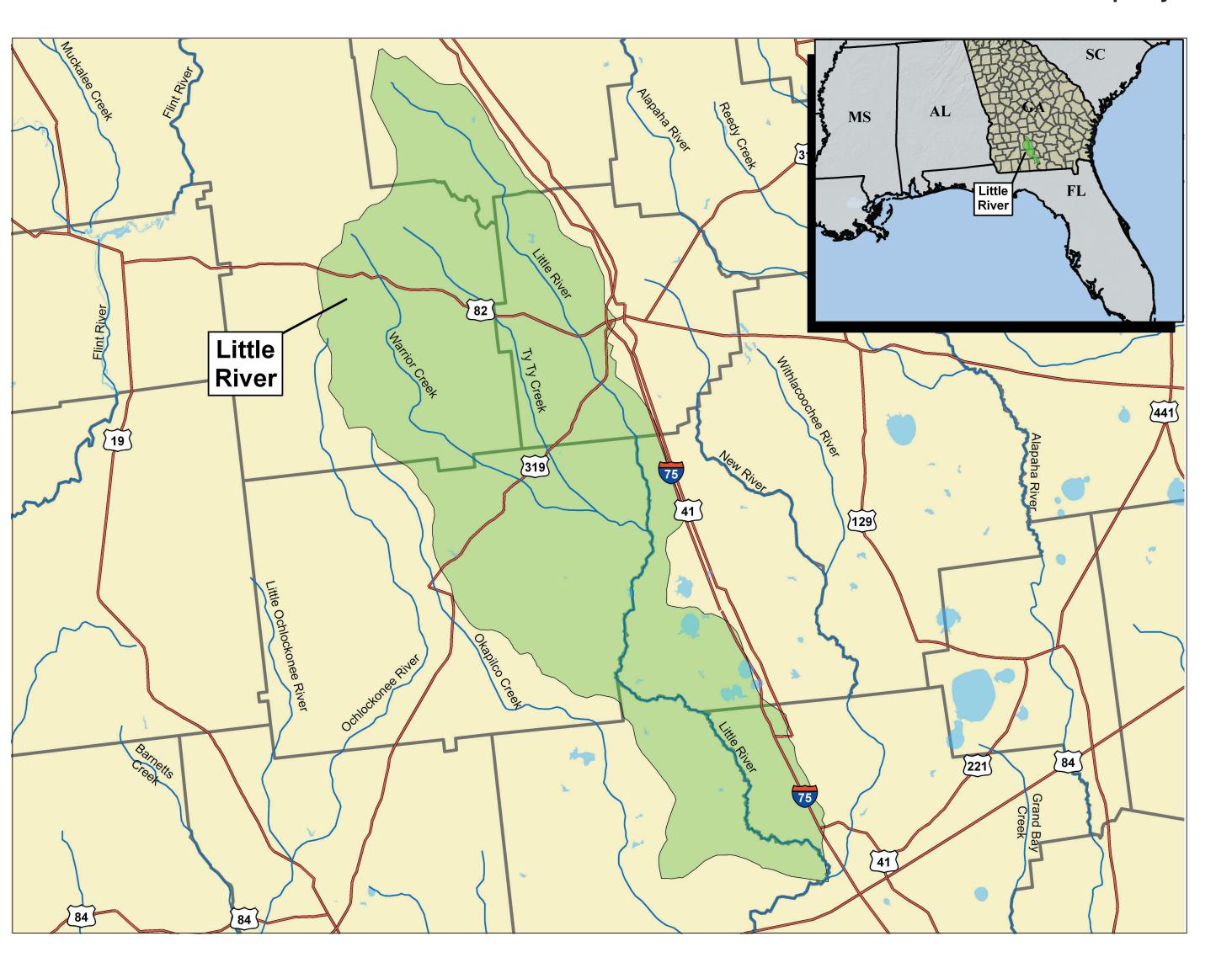


# United States Department of Agriculture

# USDA Conservation Effects Assessment Project (CEAP)

Little River Watershed, Georgia: 2004-2006

An ARS\* Benchmark Research Watershed, one of 24 CEAP watershed projects.



## **CEAP Assessment**

Evaluate effects of riparian buffers and other practices in reducing pesticide, nutrient, and sediment water pollution.

# **Watershed Description**

- Near Tifton, Georgia
- 82,560 acres
- 40% woodland, 36% cropland, 18% pasture
- Georgia has designated many streams as impaired by low dissolved oxygen levels.

### Issues:

Runoff from farms carries pesticides, nutrients, and soil through dense forests to slow-moving streams that eventually pour into the Suwanee River.

Effects of drought on irrigation water supplies.

\*Agricultural Research Service

# Approach

Water sampling: Oxygen, pesticides, phosphorus, nitrate-nitrogen, sediment, and temperature.

Watershed models: A systems model will be developed for predicting effects of conservation initiatives, land use changes, and irrigation water needs.

Assess practices: Plot and small watershed experiments will examine effects of best management practices (BMPs) on chemical and sediment transport in both Georgia Coastal Plain and South Florida agro-ecosystems.

Large-scale studies will assess effects on runoff quantity and aquifer recharge.

# **Communicating Results**

Three annual progress reports, recommendations on BMPs for improving water quality.



Irrigation water management field evaluation.

## Collaborators

- USDA, Natural Resources Conservation Service
- U.S. Geological Survey
- Georgia Cotton Commission
- Georgia Environmental Protection Division
- University of Georgia
- Georgia Technical Institute

# Contact

David Bosch, USDA ARS (dbosch@tifton.usda.gov)

**NRCS State Conservationist** James Tillman



Clean till vegetables on plastic.



Garmin GPS hand held unit.

Timeline

December 3rd ARS Benchmark Watersheds progress report

**December** 4th ARS Benchmark Watersheds progress report